



Medical Protocol and Procedure

Seizure Management

Policy

The nurse shall ensure individuals, responsible parties, and all caregivers have an understanding of seizures as well as the medications, interventions, and monitoring strategies used to control seizures and to minimize their negative impact on the quality of life. Individuals with uncontrolled seizure activity or that have Diastat as part of their seizure protocol will be referred to Skilled Nursing by the program manager for the Registered Nurse to assess and identify education or management needs.

Procedure

1. The individual's risk factors and actual or potential health problems should be included in the health assessment report and also in the Plan as needed.
 2. Seizure status and anticonvulsant medications should be discussed and documented as part of the individual's annual and quarterly review periods.
 3. Information regarding the type, frequency, and pattern of seizure activity; precipitating and associated factors; and trends in seizure activity should be included in the Plan.
 4. Information about the potential and actual side effects of the prescribed anticonvulsant medications should be included in Psychotropic Consent discussions if the anticonvulsant is identified as a psychotropic medication.
 5. Training sessions for direct care staff as well as other team members should occur. These sessions should include specific issues related to the individual's seizures as well as overall observation, management, documentation, and safety issues related to seizure activity.
 6. Specific nursing activities developed to eliminate and reduce seizures and to assist the person become more independent in management of the seizure disorder should be included in the Plan as needed. This may include activities related to prevention of injuries and secondary complications.
 7. The nursing notes should reflect that diagnostic procedures were completed as ordered.
1. Appropriate injury protective practices will be initiated as prescribed by the primary care prescriber or recommended by care team.
 2. The individual's seizure activity should be accurately documented in the individual's record. Periodic review to identify trends and changes will be documented in the nursing notes. Direct Care staff may use seizure log for tracking of seizure activity and characteristics or maintain accurate documentation of infrequent seizure activity in the Medical Support Log.

10. The nurse should monitor the results of seizure management program and make recommendations to the primary care prescriber and interdisciplinary team for changes based on the progress noted.

11. Side effects and interactions of medications should be documented in the nursing notes and reported immediately to the primary care prescriber.
 1. Trends and changes in seizure activity (type and/or frequency) should be documented in the Medical Support Log by the DSP or by the nurse in skilled nursing notes and reported to the primary care prescriber.
 2. Seizure records will be reviewed on a regular basis for accuracy and completeness by program manager, nursing staff, or primary care physician.

14. Orders for Diastat will follow recommendations and requirements as outlined by DBHDS and identified direct care staff will receive the DBHDS Diastat Module and receive RN oversight within a minimum of every 6 months.

15. If there is a vagal nerve stimulator or other nerve stimulators in place, identified direct care staff will receive specific training for use and maintenance of the implanted device.

Before a seizure occurs:

1. Safety measures should be taken if there is an indication that the person is experiencing an aura before the onset of a seizure, (e.g., have the individual lie down).
2. Determine if changes can be made in activities or situations that may trigger seizures.
3. Keep the bed in a low position with siderails up, and use padded siderails as needed.
(These precautions help prevent injury from fall or trauma.)
4. Individuals with altered bowel habits, slowed activity, and /or decreased motor skills before a seizure.

During a seizure: (Ictal stage)

1. When a seizure occurs, observe and document the following:
 - a. Date, time of onset, duration
 - b. Activity at time of onset
 - c. Level of consciousness (confused, dazed, excited, unconscious)
 - d. Presence of aura (if known)
 - e. Movements
2. Body part involved
 - progression and sequencing of activity (site of onset of first movement is very important as well as pattern, order of progression, or spreading involvement)
 - symmetry of activity
 - unilateral or bilateral (one side or both sides of body)

3. Type of motor activity

- clonic (jerking)
- myoclonic (single jerk of muscle or limb)
- tonic (stiffening)
- abnormal posturing movements,
- dystonia,
- eyes: eye deviation, open, rolling or closed, eyelids flickering
- head turning,
- twitching

f. Respirations (impaired/absent; rhythm and rate)

g. Heart (rate and rhythm)

h. Skin changes

- color/temperature;
- pale/cyanotic, (also check lips, earlobes, nailbeds)
- cool/warm;
- perspiration/clammy)

i. Gastrointestinal

- belching
- flatulence
- vomiting

j. Pupillary size, symmetry, and reaction to light

k. Changes in sensory awareness (auditory, gustatory, olfactory, vertiginous, visual)

l. Presence of other unusual and/or inappropriate behaviors

4. Ensure adequate airway.

- a. Loosen clothing, postural support devices and/or restraints.
- b. DO NOT try to force an airway or tongue blade through clenched teeth. (*Forced airway insertion can cause injury.*)
- c. Turn the person into a side-lying position as soon as convulsing has stopped. (*This will help the tongue return to its normal front-forward position and will also allow accumulated saliva to drain from the mouth.*)

5. Protect the person from injury (e.g., help break fall, clear the area of furniture).

6. DO NOT restrain movement. (*Trying to hold down the person's arms or legs will not stop the seizure. Restraining movement may result in musculoskeletal injury.*)

7. Remain with the person and give verbal reassurance. (*The person may not be able to hear you during unconsciousness but verbal assurances help as a person is regaining consciousness.*)

8. Provide as much privacy as possible for the individual during and after seizure activity.

9. Provide other supportive therapy as ordered by primary care prescriber.

After the Seizure: (Postictal Stage)

1. After the seizure activity has ceased, record the presence of the following conditions and their duration in the individual's record on Seizure Log and Medical Support Log. Continue to assess until person returns to their baseline.

- a. gag reflex, decreased

- b. headache (character, duration, location, severity)
- c. incontinence (bladder and bowel)
- d. injury (bruises, burns, fractures, lacerations, mouth trauma)
- e. residual deficit
 - behavior change
 - confusion
 - language disturbance
 - poor coordination
 - weakness/paralysis of body part(s)
 - sleep pattern disturbance

2. Allow the individual to sleep; reorient upon awakening. *(The individual may experience amnesia; reorientation can help regain a sense of control and help reduce anxiety.)*

3. Conduct a post seizure evaluation

- a. What was the person doing prior to the seizure?
- b. Was this the first seizure?
- c. Review current medications including recent changes in medicine and/or dose.
- d. Other illnesses?
- e. Possible precipitating factors

Possible Precipitating Factors for Seizures

Physical

- Overexertion
- Sleep deprivation
- Alteration in bowel elimination
- Fever
- Recent head trauma
- Concurrent illness/infections
- Over-hydration
- Excesses in caffeine, sugar, and other foods

Psychosocial/emotional • Stress

- Depression
- Anxiety
- Psychosis
- Anger

Metabolic and Electrolyte Imbalance

- Low blood glucose
- Low sodium
- Low calcium
- Low magnesium
- Dehydration
- Hyperventilation

Medication or chemical

- Reduction or inadequate treatment of AEDs
- Withdrawal of alcohol or other sedative agents
- Administration of drugs with pro-convulsant

properties (e.g., central nervous system stimulants and anticholinergics including over the counter antihistamines)

- Most dopamine blocking agents
- Newer antipsychotics, particularly clozapine
- Antidepressants, especially bupropion
- Immune suppressants such as cyclosporine
- Some antibiotic therapies
- Toxins

Hormonal Variations

- Menstruation
- Ovulation
- Pregnancy

Environmental

- Particular odors
- Flashing lights
- Certain types of music

General Health

1. Avoid constipation, excessive fatigue, hyperventilation and stress because they may trigger seizures.
2. Seizures may increase around the time of menses.
3. Fever may trigger seizures, therefore, the fever and underlying cause must be treated. If antibiotics are ordered, interactions with AEDs should be evaluated.
4. Environmental and recreational risk factors that should be avoided or minimized:
 - a. Electric shocks
 - b. Noisy environments
 - c. Bright, flashing lights
 - d. Poorly adjusted televisions or computer screens
5. Showers, rather than tubs baths, should be taken, when possible.

Diet

1. A well balanced diet should be eaten at regular times.
2. Coffee and other caffeinated beverages should be limited to a moderate amount.
3. Fluid intake should be between 1,000 to 1,500 ml per day (depending on the weather).

Physical Activity

1. Regular activity and exercise should be encouraged. Activity tends to inhibit rather than increase seizures. However, over-fatigue and hyperventilation should be avoided. When possible, exercise should take place in climate-controlled settings.
2. Activities that could harm the patient should be avoided. The person may swim if accompanied by someone who knows what to do if a seizure occurs. The person should wear a life jacket and stay in relatively shallow water to facilitate seizure management should a seizure occur.
3. Regular sleep patterns are important.

